September 1, 2004

Mr. Gregg R. Overbeck Senior Vice President, Nuclear Arizona Public Service Company P. O. Box 52034 Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 -

REQUEST FOR ADDITIONAL INFORMATION RE: BULLETIN 2003-01, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY SUMP

RECIRCULATION AT PRESSURIZED WATER REACTORS"

(TAC NOS. MB9596, MB9597 AND MB9598)

Dear Mr. Overbeck:

By letter dated August 8, 2003, Arizona Public Service Company (APS or the licensee) provided its 60-day response to NRC Bulletin 2003-01 for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The Bulletin requested licensees either (1) state that the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation functions have been analyzed with respect to the potentially adverse post-accident debris blockage effects identified in the Bulletin and are in compliance with all existing applicable regulatory requirements, or (2) describe any interim compensatory measures that have been implemented or that will be implemented to reduce the interim risk associated with potentially degraded or nonconforming ECCS and CSS recirculation functions until an evaluation to determine compliance is complete.

The staff has determined that additional information is needed in order to complete its review and evaluation of your August 8 response to Bulletin 2003-01. The enclosed questions were e-mailed to your staff on August 25, 2004. Any differences between the enclosed request for additional information and the questions that were e-mailed are editorial or clarifications. Your staff agreed to submit a response to these questions within 60 days of the date of this letter.

Sincerely,

/RA/

Mel B. Fields, Senior Project Manager, Section 2 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. STN 50-528, STN 50-529,

and STN 50-530

Enclosure: Request for Additional Information - Bulletin 2003-01

cc w/encl: See next page

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Project Directorate IV

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Enclosure: Request for Additional Information - Bulletin 2003-01

cc w/encl: See next page

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*Per T. Marsh deferral memo

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REQUEST FOR ADDITIONAL INFORMATION

BULLETIN 2003-01, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON

EMERGENCY SUMP RECIRCULATION AT PRESSURIZED WATER REACTORS"

ARIZONA PUBLIC SERVICE COMPANY

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

DOCKET NOS. STN 50-528, STN 50-529, AND STN 50-530

By letter dated August 8, 2003, Arizona Public Service Company (APS or the licensee) provided its 60-day response to NRC Bulletin 2003-01 for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The Bulletin requested licensees either (1) state that the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation functions have been analyzed with respect to the potentially adverse post-accident debris blockage effects identified in the Bulletin and are in compliance with all existing applicable regulatory requirements, or (2) describe any interim compensatory measures that have been implemented or that will be implemented to reduce the interim risk associated with potentially degraded or nonconforming ECCS and CSS recirculation functions until an evaluation to determine compliance is complete. The staff has completed its review of the August 8 response and has determined it needs the following additional information to complete our review:

- Section 2.3 of the August 8 response states that "[APS] Engineering will identify plant changes needed to address the potential for debris accumulation on the pump bay personnel access doors. This action will be completed by November 30, 2003, with any plant changes to be implemented prior to startup following the subsequent refueling outages in each unit ..." Please describe in detail the plant changes which were identified, the basis or bases for implementing the plant changes, the schedule for and completion status of the changes, any changes to any operating or maintenance procedures, and associated operator training.
- 2. Sections 3.1, 3.2, 3.3, 3.4 and 3.5 of the August 8 response states that APS plans to defer the following training/changes until the Westinghouse Owner's Group (WOG) addresses the issues and related revisions to the EPGs in CEN-152 are effected:
 - a. Operator and staff training on indications of and responses to sump clogging.
 - b. Procedure actions that delay the switchover to containment sump recirculation.
 - c. Procedure actions that delay refueling water tank (RWT) inventory depletion.
 - d. Procedure changes that provide for alternate water sources to refill the RWT.
 - e. Procedure changes that provide for alternate sources to inject water into the reactor coolant system.

The WOG has now developed operational guidance in response to Bulletin 2003-01 for Westinghouse and CE plants. Please provide a discussion of your plans to consider implementing this new WOG guidance. Include a discussion of the WOG compensatory measures that have been or will be implemented for your plants. Provide technical justification for those WOG recommended compensatory measures not being implemented at your plants. Also include a detailed discussion of the procedures being modified, the operator training being implemented, and your schedule for implementing these compensatory measures.

3. NRC Bulletin 2003-01 provides possible interim compensatory measures licensees could consider to reduce risks associated with sump clogging. In addition to those compensatory measures listed in Bulletin 2003-01, licensees may also consider implementing unique or plant-specific compensatory measures, as applicable. Please discuss any possible or unique plant-specific compensatory measures you considered for implementation at your plant. Include a basis for rejecting any of these additional considered measures.

cc:

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